HSI HAVERFORD SYSTEMS INC
Custom Technology Integration

Conference Room Systems

Equipment, Technology and Systems for the High Tech Conference Room

800-486-5276

HuddleCam-HD™ 12x

User Manual

Please read this Manual before setting up and using the camera to ensure it's best performance.

www.HuddleCamHD.com

Providing USB Video Conferencing Solutions for the 21st Century

HuddleCamHD

USB 3.0 HD Camera

Precautions.....

Safety Tips.....

- Please read this manual carefully before using the camera.
- Avoid damage from stress, violent vibration or liquid intrusion during transportation, storage or installation.
- Take care of the camera during installation to prevent damage to the camera case, ports, lens or PTZ mechanism.
- Do not apply excessive voltage. (Use only the specified voltage.) Otherwise, you may experience electrical shock.
- Keep the camera away from strong electromagnetic sources.
- Do not aim the camera at bright light sources (e.g. bright lights, the sun, etc.) for extended periods of time.
- Do not clean the camera with any active chemicals or corrosive detergents.
- Do not disassemble the camera or any of the camera's components. If problems arise, please contact your authorized dealer.
- After long term operation, moving components can wear down. Contact your authorized dealer for repair.

Supplied Accessories.....

- HD Color Video Camera (1)
- 12V/2.5A DC Power Adapter (1)
- RS232 CABLE (1)
- USB 3.0 A-B Cable (2m), Serial Control cable,
- IR Remote Controller (1)
- User Manual (1)

Rear Board Connectors

High Definition Interface:	**USB 3.0 B**
Control Signal Interface:	**Mini DIN-8 (VISCA IN/RS232)**
Control Signal Configuration:	**Dip-Switch Pin 7/TTL Signal; Baud Rate: 9600bps**
Power Supply Interface:	**DC 12V Socket**

Electrical

Power Supply Adapter:	**12V DC/2A**
Input Voltage:	**12V DC (10.5-14V DC)**
Input Power:	**24W (MAX)**

Structure

Material:	**Aluminum, Plastic**
Dimensions (W x H x D):	**10.44 in. (265.176mm) x 6.75 in. (171.45mm) x 5.81 in. (147.574mm)**
Mass:	**3.32 lbs. (1.51 kg.)**
Working Environment:	**Indoor**
Operating Temperature:	**32°F (-0°C) to 113°F (+45°C)**
Storage Temperature:	**-14°F (-10°C) to 140°F (+60°C)**
Color:	**Silver Gray**

Rear Board & Function.....

1. Front View.....

1. **Lens**

   12x Optical Zoom.

2. **Camera Base**

   Base of the camera.

3. **IR Receiver**

   To receive IR remote controller signal.

2. Rear View.....

7. **System Select**

   For selecting output resolution.

8. **VISCA IN Port**

   For hard wired remote control from a 3rd party PC, joystick, etc...

9. **USB 3.0 B Male Interface**

   For connection to PC USB 3.0 port (NOT compatible with USB 2.0 port or driver).

10. **DVI-I Video Output**

    Provides simultaneous digital or analog video output to monitor.

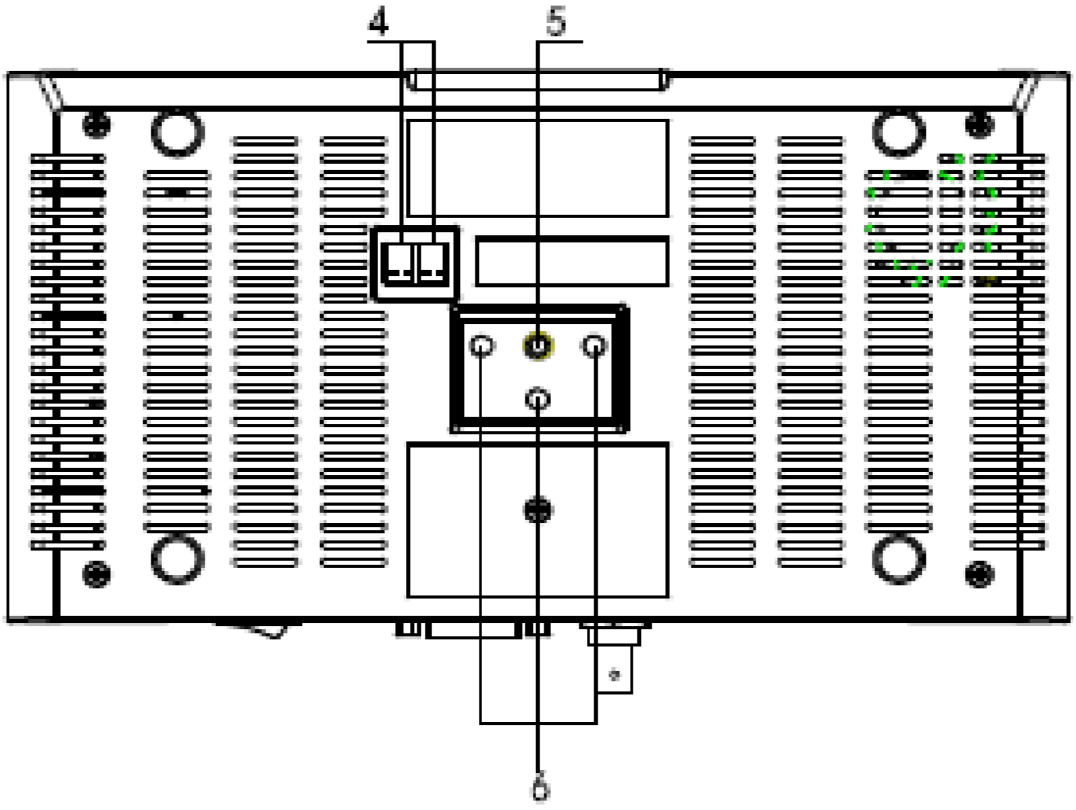
11. **12VDC Input Power Supply Jack**

    Only use the Power Adapter supplied with this camera.

12. **Power Indicator Light**

    Red LED illuminates when unit is powered.

2. Bottom View.....



4. **Dip Switches**

   For putting camera in setup modes.

5. **Tripod Screw Hole**

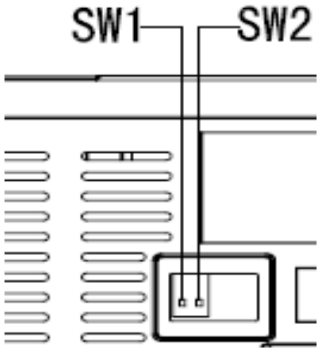
   Will accept 1/4-20 bolt from 3rd party tripod, wall or ceiling mount.

6. **Additional Mounting Holes**

   Will accept 1/4-20 bolt from 3rd party tripod, wall or ceiling mount.

4. Dip-Switch & Rotary Switch Settings.....

Dip Switches – For putting camera in setup modes.



	SW2-2	SW2 -1	instruction
1	ON	OFF	Undefined
2	OFF	OFF	Updating mode
3	OFF	ON	Debugging mode
4	ON	ON	Working mode

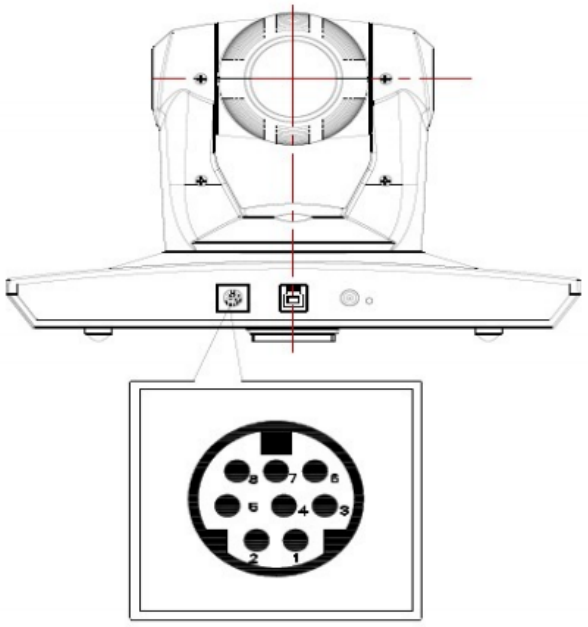
Note: When changing Dip-Switch settings, make all changes with camera powered off.

Rotary Switches - For selecting output resolution.

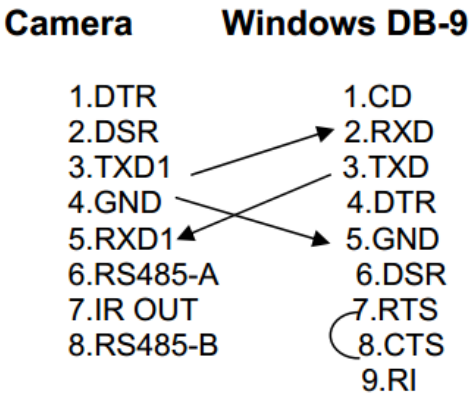
Dial Setting	Resolution
0	1080p-60
1	1080p-50
2	1080p-30
3	1080p-25
4	720p-60
5	720p-50
6	720p -30
7	720p -25
8	---
9	---
A	---
B	---
C	---
D	---
E	---
F	---

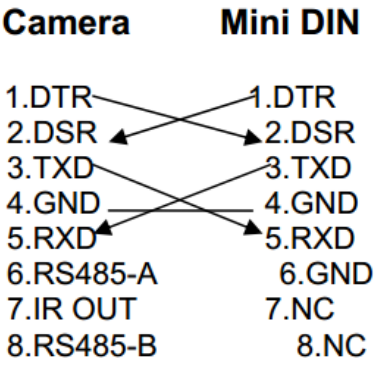
Cable Connection Info.....

VISCA RS-232C - IN Reference.....



No.	Function
1	DTR
2	DSR
3	TXD 1
4	GND
5	RXD 1
6	RS485-A
7	IR OUT
8	RS485-B





OSD MENU.....

On Screen Display Menu - Use the OSD menu to access and change the camera's settings.

Note: You cannot manually move the camera (pan/tilt) when the OSD menu is visible on the screen.

The Menu is as follows:

- **LANGUAGE** **Default Value: English**
  Changes the cameras menu language: Chinese/English
- **SYSTEM OPTION**
  - **PROTOCOL** **Default Value: VISCA**
    Changes the Cameras Protocol Type: Visca/Pelco-P/Pelco-D
  - **ADDR** **Default Value: 01**
    Visca (1-7) Pelco-P/Pelco-D (1-63)
  - **B. RATE** **Default Value: 9600**
    2400/4800/9600/115200
  - **RS485** **Default Value: Off**
    On when using RS485 Communication (On/Off)
  - **ARM. VER** **Default Value: 1.0A**
    On when using RS485 Communication (On/Off)
  - **FPGA. VER** **Default Value: 1.0**
    On when using RS485 Communication (On/Off)
  - **CAM. VER** **Default Value: 010404**
    On when using RS485 Communication (On/Off)
  - **MODEL** **Default Value: UH-S**
    Auto/Manual

- **CAMERA OPTION**
  - **EXPOSURE**
    - **EXP. MODE** **Default Value: Auto**
      Auto/Manual/Shutter/Iris
    - **SHUTTER** **Default Value: --**
      1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/725, 1/100, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000 (Only available in Manual Shutter mode)
    - **GAIN** **Default Value: --**
      0-13 (Only available in Manual Iris mode)
    - **BRIGHT** **Default Value: 5**
      0-9
    - **EV. MODE** **Default Value: Off**
      On/Off (Only available in non-Manual mode)
    - **LEVEL** **Default Value: --**
      -3-3
    - **WDR** **Default Value: Off**
      On/Off
    - **LEVEL** **Default Value: --**
      0-5
  - **COLOR**
    - **WB MODE** **Default Value: ATW**
      White Balance Mode:
      Auto/Indoor/Outdoor/OnePush/ATW/Manual
    - **R. GAIN** **Default Value: --**
      Red Gain 0-50 (Only available in Manual mode)
    - **B. GAIN** **Default Value: --**
      Red Gain 0-50 (Only available in Manual mode)
    - **GAMMA** **Default Value: 0**

Gamma Setting: 0-3

- SATURATION — Default Value: 3
  Saturation Setting: 0-9
- APERTURE — Default Value: 5
  Aperture Setting: 0-9
- FLICK — Default Value: Off
  Flick Setting 50HZ/60HZ/Off
- NR LEVEL — Default Value: 2
  NR Level Setting: 0-9
- CONTRAST — Default Value: 3
  Contrast Setting: 0-9

- LEN
  - FOCUS — Default Value: Auto
    Auto/Manual

- PT OPTION
  - POWER. ACT — Default Value: Off
    0/1,Off
  - SPEEDBYZ — Default Value: On
    The farther the camera is zoomed in the slower pan and tilt become
    On/Off
  - MOUNT MODE — Default Value: Up
    Up/Down
  - IR M.SPEED — Default Value: 16
    IR Remote Control Move Speed: 5-24
  - IR Z.SPEED — Default Value: 07
    IR Remote Control Move Speed: 1-7
  - MIN.SPEED — Default Value: 0
    Minimum Start Speed for Serial Command: 0-9

- SCAN.SPEED — Default Value: 4-15
  Move Speed:

- **V. FORMAT** — Default Value: by Rotary Switch
  Selects Output Resolution (Overrides Rotary Switch Setting Until Next Power Cycle)
  - 1080p60, 1080p50, 1080p30, 1080p25, 720p60, 720p50, 720p30, 720p25

- **RESET**
  - SYSTEM. RESET — Default Value: NO
    System Reset: Protocol: VISCA; Address: 1; Baud Rate: 9600; RS485: Off (Yes/No)
  - CAM. RESET — Default Value: NO
    Camera Parameter Reset (On/Off)
  - PT. RESET — Default Value: NO
    Power Action: Off; Speed by Zone: On; Mount Mode: Up; IR Move Speed: 16; IR Zoom Speed: 7; MIN. Speed0; SCAN. Speed 10 (On/Off)
  - ALL. RESET — Default Value: NO
    Rest Above

- **HELP**
  Opens Remote Control Navigation Help Screen
  - ▲ ▼ — Select Menu
  - ◀ ▶ — Change Setting
  - HOME — Enter
  - MENU — Return

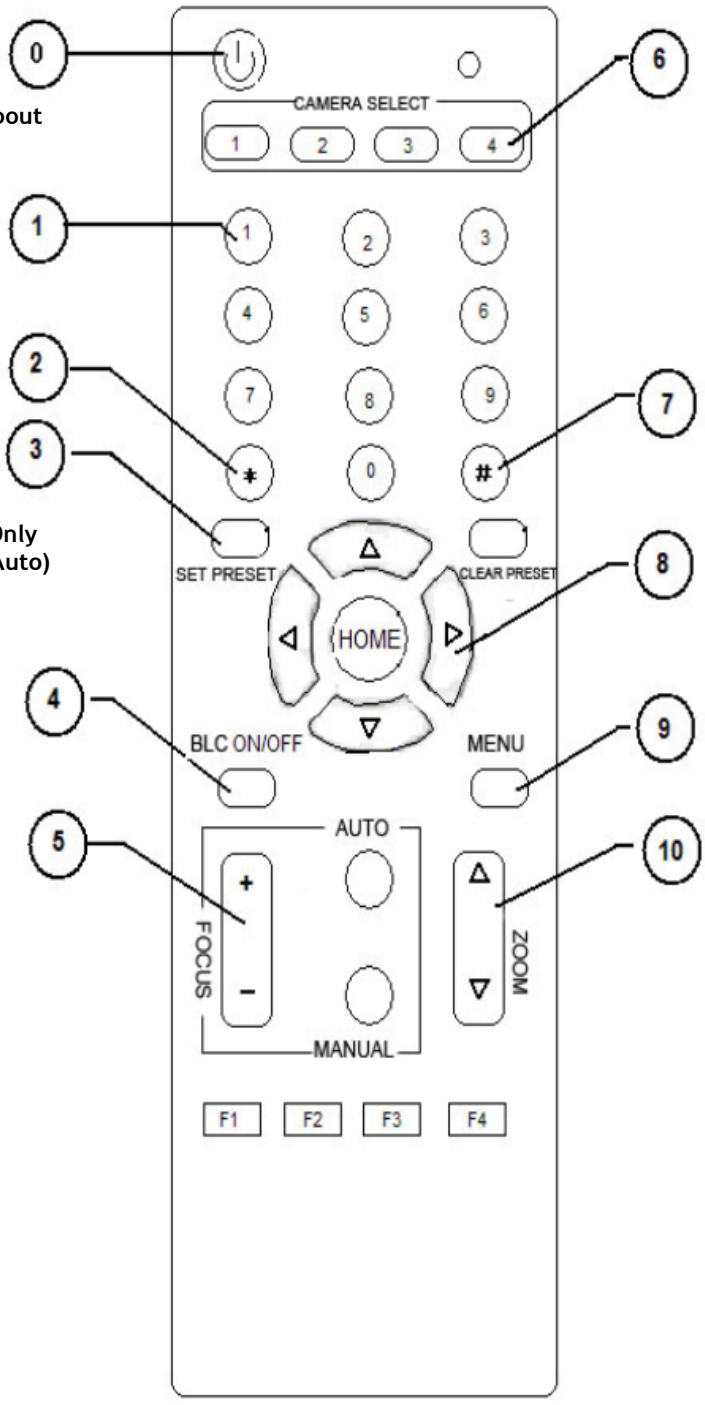
- **EXIT**

- **Save** **Yes/No**

Notice: Press (HOME) key to confirm
Press (MENU) key to return to the main menu

IR Remote Controller (**Note:** Some buttons do not operate for all camera models)

0. Standby key
   After pressing the standby key, the camera will go into standby mode. Press again, the camera will turn on. (Note: Standby mode power consumption is about half of normal mode consumption)
1. Number keys
   For setting or recalling presets
2. * key
   For key combination use
3. Set preset key:
   Set preset key + 0-9 number key.
   Clear preset key.
   Clear preset key + 0-9 number key or.#+#+#.clear all the presets
4. BLC control key
   BLC ON: Turn on Back Light Compensation (only works when exposure mode setting is Auto)
   BLC OFF: Turn off Back Light Compensation (Only available in the exposure mode effective for Auto)
5. Focus control
   Focus+: focus farther away
   Focus-: focus nearer
   Auto focus: automatically focus on item in center of frame
   Manual focus: To use Focus + and -
6. Camera address selection:
   Select the camera which you want to be controlled
7. # key
   For key combination use
8. Pan/Tilt control
   Press ▲ key: Tilt Up
   Press ▼ key: Tilt Down
   Press ◄ key: Pan Left
   Press ► key: Pan Right
   (HOME) key: Return to the middle position
9. Menu setting
   Open or close the OSD menu
10. Zoom Control
    Zoom ▼Zoom Out
    Zoom ▲Zoom Out
11. Camera IR remote control address selection
    (*)+(#)+(F1): Camera Address No.1
    (*)+(#)+(F2): Camera Address No. 2
    (*)+(#)+(F3): Camera Address No. 3
12. (*)+(#)+(F4): Camera Address No. 4



Connection Instructions.....

1. Connect included Power Supply to the camera.
2. Wait for camera to come to Home Position.
3. Connect included USB 3.0 cable to camera and USB 3.0 port of PC.
4. Select and configure camera in your software of choice.

NOTE: Failure to follow this sequence may result in no connection to PC.

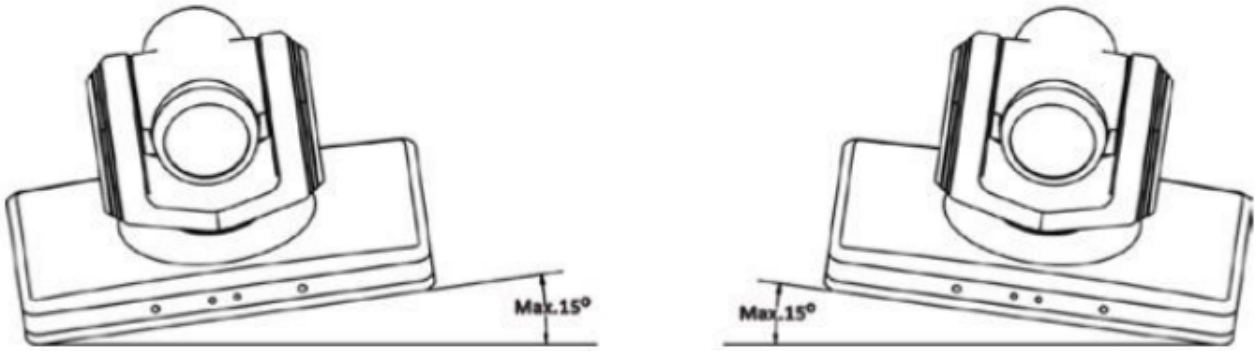
Care Of The Unit.....

Remove dust or dirt on the surface of the lens with a blower (commercially available).

Installation Instructions.....

Desktop Installation.....

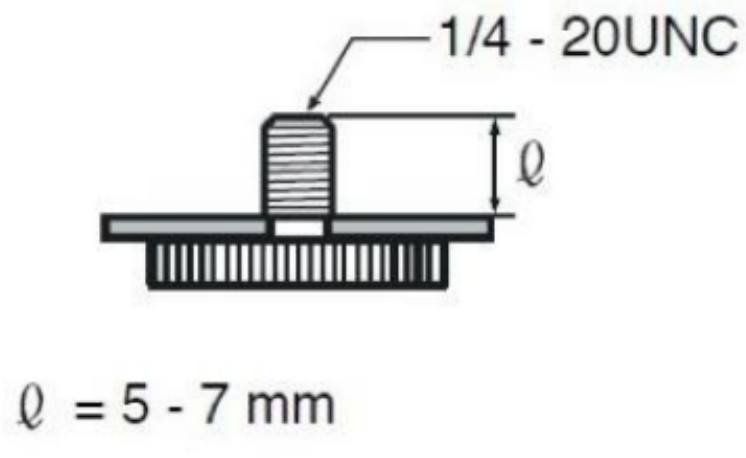
When using the HuddleCam™ on a desk, Make sure that it will stand level. If you want to use the camera on an incline, make sure the angle is less than 15 degrees to ensure that the camera's pan and tilt mechanism operates normally.



Tripod Installation.....

When using the HuddleCam™ with a tripod, screw the tripod to the bottom of the camera. The tripod screw must fit below specifications:

Note: Tripod must stand on a level surface.



Troubleshooting……

Problem	Cause	Resolution
There is no power to the camera.	Power adapter is disconnected from mains or from camera.	Check the connections between the camera, power adapter and mains. If anything is disconnected, reconnect it.
	Power switch is set to OFF.	Set the power switch to ON.
Camera will not connect to the PC via USB.	USB cable is bad.	Try new USB Cable
	Camera connects sometimes.	Connect USB only after camera has completely booted.
Camera unable to pan, tilt, and/or zoom.	Menu is currently displayed on the screen.	Retry after exiting the menu.
	Pan, tilt or zoom range limit was reached.	Try to pan/tilt/zoom in the other direction.
Remote control not working.	The “camera select” button on the remote control is not set to match the “IR select” switch number set on the camera.	Choose the correct “IR select” number to match camera settings.
Camera cannot be controlled via VISCA.	The connection between the PC and camera is incorrect.	Refer to Cable Connection Info section of this manual.
	Commands being sent are incorrect.	Refer to VISCA manual.
The Camera is not working at all.	No response or image from camera.	Disconnect power, and wait a few minutes, then connect the power again. (Did you try turning it off and on Again) Retry.

Video:

Sensor: 1/2.8 inch high quality HD CMOS sensor
Dynamic Range: Dynamic image: 16: 9 2,070,000 effective pixel
Resolution: 1080P60/50/30/25, 1080I60/50, 720P60/50/30/25
Optical Zoom: 12x optical zoom, f=4.7---84.6mm
Viewing Angle: 6°（far）--70°（near）
Min Lux: 1.0Lux
White balance : Auto / Manual
Focus: Auto / Manual
Iris : Auto / Manual
Electronic shutter : Auto / Manual

Inputs:

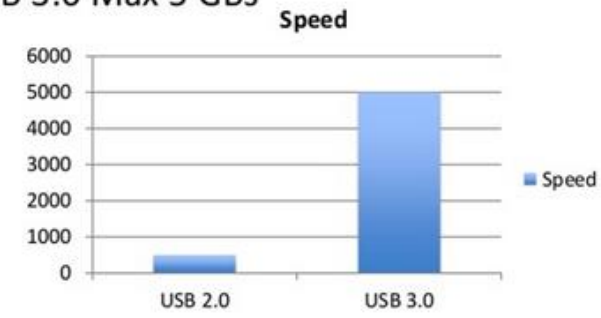
HD Interfaces: USB 3.0 & DVI-I Interface
Control: RS-232 8 pin mini DIN

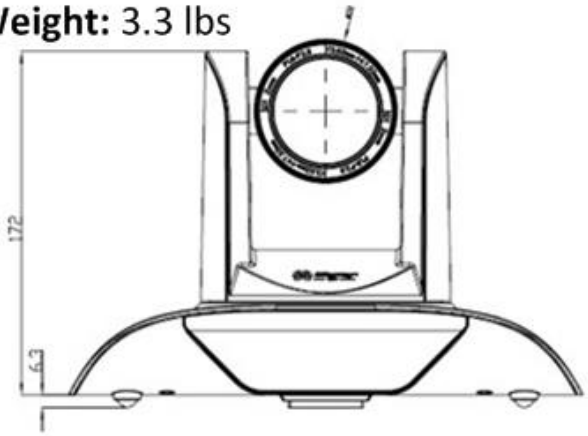
General:

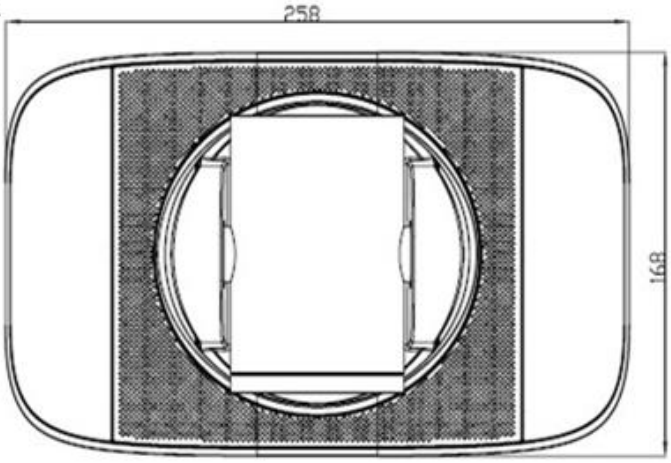
Rotation: Pan rotation: -300～ ±900
Tilt rotation: +1750°
Control: RS-232 8 pin mini DIN
Power: AC110V-AC220V to DC12V/1.5A
Weight: 3.3 lbs

USB 2.0 vs USB 3.0

- USB 2.0 Max 480 MBs
- USB 3.0 Max 5 GBs







HSI HAVERFORD SYSTEMS INC
Custom Technology Integration

Hi-Tech Meeting Rooms › Sound Masking › Digital Signage › Network Video

Part of the HuddleCamHD Camera Line

HUDDLECAMHD 10X

HuddleCamHD | 10X Optical Zoom | USB 3.0 | 1920x1080p

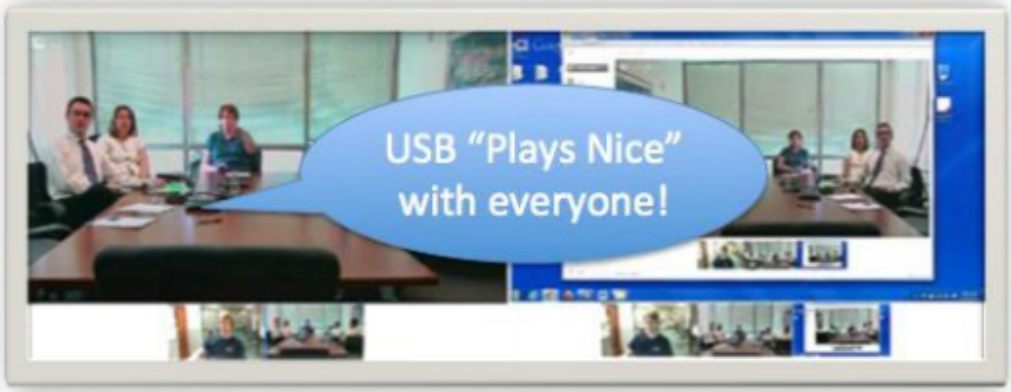
HUDDLECAMHD 18X

18X Optical Zoom USB 3.0 1920x1080p Camera

HUDDLECAMHD 20X

HuddleCamHD | 20X Optical Zoom | USB 3.0 | 1920x1080p

Adobe BlueJeans CISCO easymeetingnet FUZEBOX



GoToMeeting Spranto vidtel Vidyo VSee webex zoom

152 Robbins Road Downingtown, PA 19335 · www.haverford.com · Tel: 800.486.5276 · Video: 173.161.232.68

HSI HAVERFORD SYSTEMS INC
Custom Technology Integration

Hi-Tech Meeting Rooms › Sound Masking › Digital Signage › Network Video

Conference Room Service and Support

Haverford Systems is 100% Solar Powered.

Join our USB 3.0 Webinar every Friday @ 12PM EST 9AM PST
Click Here to Sign Up

Haverford Systems is a design/build integration company focused on customer service and support. Haverford system entire office is Video Enabled with all the technology available for demo.

Call Us for more info

Call toll free: (800) 486-5276

Copyright 2014© Haverford Systems

152 Robbins Road Downingtown, PA 19335 · www.haverford.com · Tel: 800.486.5276 · Video: 173.161.232.68